CLAIMS

What is claimed is:

1. A composition comprising:
   (a) An organic conducting polymer selected from the group consisting of polyaniline, polythiophene, polypyrrole, and their derivatives, and poly(heteraromic vinylenes), doped with an organic protonic acid with 1 to 30 carbons, such that there are between 0.3 and 2.0 acid molecules for each nitrogen or sulfur in the polymer backbone, said polymer optionally doped with excess organic protonic acid with 1 to 30 carbons such that there are between 0.15 and 1 molecules of the excess organic protonic acid for each nitrogen or sulfur in the polymer; and
   (b) plasticizer at a concentration of between 0.01 and 40% by weight.

2. The composition of Claim 1 wherein the plasticizer is at a concentration of between 5 and 20% by weight.

3. The composition of Claim 1 or Claim 2 further comprising 0.1 to 20% by weight of highly acicular conductors.

4. The composition of Claim 3 comprising 0.5 to 10% by weight of highly acicular conductors

5. The composition of Claim 4 where the highly acicular conductors are carbon nanotubes.

6. The composition of Claim 5 where the highly acicular conductors are single wall carbon nanotubes.

7. The composition of Claim 5 where the highly acicular conductors are multi-wall carbon nanotubes.

8. The composition of Claim 5 where the highly acicular conductors are carbon nanotubes selected from the group consisting of arc grown carbon nanotubes, laser grown nanotubes and high pressure carbon monoxide-grown carbon nanotubes.

9. The composition of any of Claim 1 or Claim 3 further comprising 0.001 to 1% by weight of a surfactant.

10. The composition of any of Claim 1 or Claim 3 further comprising 1 to 30% by weight of a second macromolecule.

11. The composition of Claim 1 or Claim 3 wherein the plasticizer is selected from the group consisting of alkyl or aryl sulfonic acids.

12. The composition of Claim 11 wherein the plasticizer is selected from the group consisting of dinonylnaphthalene sulfonic acid, dodecylbenzene sulfonic acid, dibutylnaphthalene sulfonic acid, camphor sulfonic acid, toluene sulfonic acid, and methane sulfonic acid.

13. A method of using the composition of any of Claim 1 or Claim 3 in an image transfer or printing process selected from the group consisting of laser transfer printing, ink jet printing, microcontact printing, offset printing, and gravure.

14. An electronic device comprising a patterned conductor comprised of the composition of Claim 1 or Claim 3.

15. The electronic device of Claim 14 where the device is selected from the group consisting of an interconnect, a via, a transistor, a source and drain electrode pair, a gate electrode, a backplane, an inductor, a capacitor and a resistor.